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How users' Internet experience affects the adoption of mobile payment: A mediation model

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Abstract

Mobile payment becomes a convenient way to complete transactions due to the increasing popularity of mobile devices and the maturity of related technologies. Users' experience of using computers and the Internet in financial activities largely affects their intention to use mobile payment. Combining the Technology Acceptance Model and Innovation Diffusion Theory, we examined the mediating effect of five factors, i.e., perceived usefulness, perceived ease of use, compatibility, risk, and privacy concern, in the relationship between Internet experience and the adoption of mobile payment. Data from 922 mobile users supported the partial mediating effects of the five factors.

Keywords: mobile payment; Internet experience; E-commerce; technology adoption; China

Introduction

Mobile payment has gained popularity in financial activities (de Meijer & Bye, 2011; Smith, et al., 2012). It refers to payment services made via mobile devices (OECD, 2012). Onsite mobile payment refers to contactless or proximity payment that requires buyers' and sellers' presence at one physical location. The key elements involved are contactless radio technologies. Offsite mobile payment refers to remote payment through a wireless payment network, requiring wireless application protocol and mobile data exchange.

Mobile payment enhances the speed and versatility of transactions (Chen, 2008). However, the adoption of mobile payment is in its infancy in various regions (Pope, et al., 2011) and presents an uneven distribution in terms of market penetration (Au & Kauffman, 2008). For instance, mobile payment is popular in some developing countries (OECD, 2012). In developed countries, mobile payment is more widely used in Japan and South Korea but less in Europe and the United States (Amoroso & Magnier-Watanabe, 2012; Sung, 2006).

The adoption of mobile payment is largely affected by users' experience and their attitudes towards new technological phenomena (Festinger, 1957). Users' experience of using products enhances their familiarity with the features of new, related products and helps users form cognitions about and confidence in using the new products (Pennings & Harianto, 1992). The experience of using Internet shopping and banking makes users familiar with online payment and allows them to recognize the value of mobile payment, e.g., adding mobility to online payment. Users' experience with computers and the Internet during accessing banking and shopping sites online makes them familiar with the virtual environment of smartphones. This experience allows the users to recognize the value of online payment and encourages them to adopt mobile payment.

Experience alone cannot explain fully the adoption of mobile payment because of new technologies and procedures involved. We relied on Technology Acceptance Model (TAM) (Davis, 1989) and Innovation Diffusion Theory (IDT) (Rogers, 1995) to understand factors that contributed to users' adoption of mobile payment. TAM and IDT are used in understanding users' adoption of new technologies and products (Chen, et al., 2004; Wang, et al., 2008). IDT was extended by including new constructs, e.g., perceived trust, perceived risk, subjective norm, and self-efficacy (Tan & Teo, 2000). TAM and IDT share common beliefs. Relative advantage in IDT is connected to perceived usefulness in TAM, while perceived ease of use in TAM is linked to complexity in IDT.

Cases have been made to combine the two. For example, a combined model was used to explain and evaluate consumer behaviour in virtual store settings (Chen, et al., 2002). Scholars also used the combination of the two to examine the antecedents of customers' intention to participate in online travel community, given that the growing presence of online travel communities led to significant developments in the travel industry (Agag & El-Masry, 2016). Recent studies used the combination to explain factors that contributed to business employees' behaviours and their intentions to use electronic learning systems (Hu, et al., 1999; Lee, et al., 2011; Liebana-Cabanillas, et al., 2015).

IDT and TAM share conceptual premises that make them as a whole an ideal tool to predict the adoption decision regarding innovation. A combination of the two can also increase the interpretability of our findings and the effectiveness in explaining users' intentions to adopt mobile payment. Technological and behavioural factors that could influence users' acceptance of mobile payment include perceived usefulness, perceived ease of use (Chandra, et al., 2010; Keramati, et al., 2012), perceived compatibility (Kim, et al., 2010), perceived

risk (Dahlberg, et al., 2008; Yang, 2005), and privacy concerns (Mallat, 2007; Schierz, et al., 2010).

Theory and hypotheses

The direct effect of Internet experience on the adoption of mobile payment

Experience is an important antecedent to behaviour (Ajzen & Fishbein, 1980; Bagozzi, 1981). Experience makes knowledge more accessible in memory (Fazio & Zanna, 1978). Knowledge gained from experience helps to shape intention (Eagly & Chaiken, 1993). Behavioural intention represents the extent to which a user performs a certain behaviour (Davis, 1989).

Experience plays an important facilitative role in technology adoption decisions (Alshamaila, et al., 2013; Lippert & Forman, 2005).Experience can affect people's attitudes towards new phenomena, new context, or new situation (Bandura, 1977). Prior practice with an innovation is essential in building 'how-to' knowledge and enhancing familiarity, trialability, and observability of the innovation (Rogers, 1995). Based on experience with an innovation, a user can build greater knowledge of and stronger beliefs about the innovation and may adopt it. There is a positive effect of relevant experience on the beliefs about the innovation and on behavioural intention to adopt the innovation (Doll & Ajzen, 1992; Fredricks & Dossett, 1983). For instance, users' experience of voice services had a significant positive impact on the likelihood of using mobile data services (Qi, et al., 2009).

Smart phones possess the basic functions of computers. An ideal smart phone, according to the literature on computer standards, has 11 essential features (Li, 2014). Almost all the essential features, e.g., real keyboard and Internet access, are basic ones that computers have. These features enhance users' familiarity with smart phones. An ideal smart phone has eight

desirable features, e.g., camera and navigation, representing functions in interpersonal connections that smart phones emphasize (Li, 2014). These features provide room for innovation. Familiarity, represented by the essential features, draws users' attention to smart phones. Innovation, represented by the desirable features, drives users' adoption of smart phones.

Hypothesis 1. Users' Internet experience positively affects their intention to use mobile payment.

The mediating effect of perceived usefulness and perceived ease of use

Smart phones, as a new type of computers, emphasise interpersonal connections (Gerpott, et al., 2013). Although they lack several features, e.g., USB ports, memory card slots, and easy word processing, they possess the basic functions of computers, e.g., Internet access and e-mail services (Li, 2014). Among the recommended features for ideal smart phones, the majority are closely associated with consumers' experience of using computers, e.g., multi-tasking operating system, large display with high screen resolution, Internet access, business productivity tool, personal information management, and host synchronisation (Chang, et al., 2009).

Users' perceptions of using computers and the Internet to make payments may affect their decisions to make payments via mobile devices. Being a core variable of TAM, perceived usefulness represents the utility value emerging from the system usage and the degree to which individuals believe that using the system improves their performance. If using a system can improve job performance, the system has a high level of perceived usefulness. Perceived ease of use represents the degree to which a person believes that using the system requires no effort. The construct is based on the quality of system interface and user-computer interaction, which reduces the complexity of usage and the users need for learning the main

functionalities and tools (Pantano & Corvello, 2014). A system that is difficult to use has a low level of perceived ease of use.

In mobile payment, perceived usefulness refers to the extent to which prospective users expect mobile payment to increase their performance in transactions. Perceived ease of use refers to the extent to which the prospective users expect mobile payment to be free of effort (Chen, 2008). Users can acquire new knowledge about a novel product when the new product relates to products with which they are already familiar (Punj & Staelin, 1983). Compared to using unrelated products, using related products can give users more information about the characteristics of new products or technologies (Johnson & Russo, 1984). It can also increase users' loyalty to new products because the users feel that they are connected to the new products (Kwon & Lennon, 2009). The experience of using related products and similar technologies enhances users' perceptions of the usefulness and the ease of use related to new products (Agarwal & Prasad, 1999). For instance, previous experience of using travel services influences the perceived usefulness and the perceived ease of use of new travel services (Kim, et al., 2008).

Perceived usefulness and perceived ease of use determine users' attitudes towards a certain system, e.g., users' choices to use an information technology. Perceived usefulness is positively correlated with the intention of users' behaviour (Venkatesh & Davis, 2000; Wang et al., 2008). Specifically, users tend to avoid the technology if they perceive that the technology is difficulty to use or it undermines performance or efficiency. Both perceived usefulness and perceived ease of use positively affect users' intention to use mobile payment. Applications and services that are too complex and time-consuming will discourage consumers form 'going mobile.' Perceived usefulness and ease of use also drive the move from PCs to smart phones while making mobile payment (Chang et al., 2009).

Hypothesis 2. Perceived usefulness mediates the positive relationship between Internet experience and intention to use mobile payment.

Hypothesis 3. Perceived ease of use mediates the positive relationship between Internet experience and intention to use mobile payment.

The mediating effect of perceived compatibility

Compatibility refers to the consistency between the innovation and users' existing values, needs, and experiences (Rogers, 1995). Compatibility is important to the diffusion of new technologies because it can reduce the potential uncertainty of using a technology. A high level of compatibility means that the innovation can meet user needs.

Compatibility in mobile payment refers to the extent to which mobile payment is consistent with users' lifestyle and modes of shopping (Chen, 2008). The novelty nature of an innovation implies that its diffusion is associated with the transformation of users' existing personal values, beliefs, needs, and experiences. Potential users need to acquire new expertise necessary to use the innovation (Zhu, et al., 2006). Experience of using related products tends to help users see the compatibility between existing products and new related products. Compatibility ensures that the innovation is not distant from users' current value systems. Lack of compatibility may cause users' resistance, which retards the diffusion of the innovation (Premkumar, et al., 1997).

Compatibility drives users' intention to use innovations (Lee et al., 2011). For example, in on-line transactions, the compatibility of electronic business (e-business) to physical processes and systems results in fewer efforts in making Internet transactions and subsequent increased use of e-business (Chatterjee, et al., 2002). Compatibility gains interests of developers' in achieving a high level of integration for new technologies (Kamal, 2006).

Business owners want adopted innovations to be consistent with their existing values and organization needs (Lee, 2004).

Compatibility is an essential determinant of the innovation adoption of information technologies. For instance, in 166 small Singaporean firms, compatibility of the innovation had a strong influence on the adoption of information systems in these businesses (Hong, et al., 2001). Scholars found that compatibility would facilitate the adoption of mobile payment (Schierz et al., 2010).

Hypothesis 4. Perceived compatibility mediates the positive relationship between Internet experience and intention to use mobile payment.

The mediating effect of perceived risk

Perceived risk has been used to explain user behaviour in decision making since 1960s (Taylor, 1974). The construct a direct antecedent of behavioural intention (Wu & Wang, 2005). Perceived risk negatively affects users' intention to adopt an innovation (Ratnasingam, 2005). The definition of perceived risk changed after the popularity of online transactions. Perceived risk was primarily related to fraud and product quality and now covers all types of financial, product performance, social, psychological, physical, or time risks when users make transactions online (Forsythe & Shi, 2003).

Perceived risk is an important determinant of users' attitudes towards online transactions (Cho, 2004). Without the ability to physically examine and inspect the products, users will perceive potential risks. Users tend to be less willing to shop in the virtual environment than in physical shops because they perceive that online shopping carries greater risk than the latter (Tan & Sutherland, 2004). The high penetration rate of Internet applications makes users anxious about various types of risks involved in online transactions, e.g., credit ratings,

bank balances, and financial data being tampered with without the owners' acknowledgement. Uncertainty about product quality, brands, and online services may cause users' concerns about an unjustifiable delay in product delivery, payment made without receiving the product, and illegal activities and fraud (Pavlou, 2003).

Perceived risk negatively affects users' intention to use mobile payment (Dong-Hee, 2010). Experience of using related products could reduce users' perceptions of the associated risk (Lehto, et al., 2004). For example, increased experience of online searching reduces users' perceived risk of online shopping, which subsequently increases users' adoption of e-commerce (Miyazaki & Fernandez, 2001).

Hypothesis 5. Perceived risk mediates the positive relationship between Internet experience and intention to use mobile payment.

The mediating effect of privacy concern

Privacy concern refers to the degree of concern about the collection and use of personal information by others (Smith, et al., 1996). Privacy concern directly affects users' behavioural intentions in ubiquitous commerce (Sheng, et al., 2008), electronic health records (Angst & Agarwal, 2009), electronic recruitment technology (Tong, 2009), and social networking communities (Fogel & Nehmad, 2009), etc. In an e-commerce context, personal information is necessary for most online transactions. Internet technologies that facilitate interactive information flows between sellers and buyers enable sellers to acquire buyers' personal information.

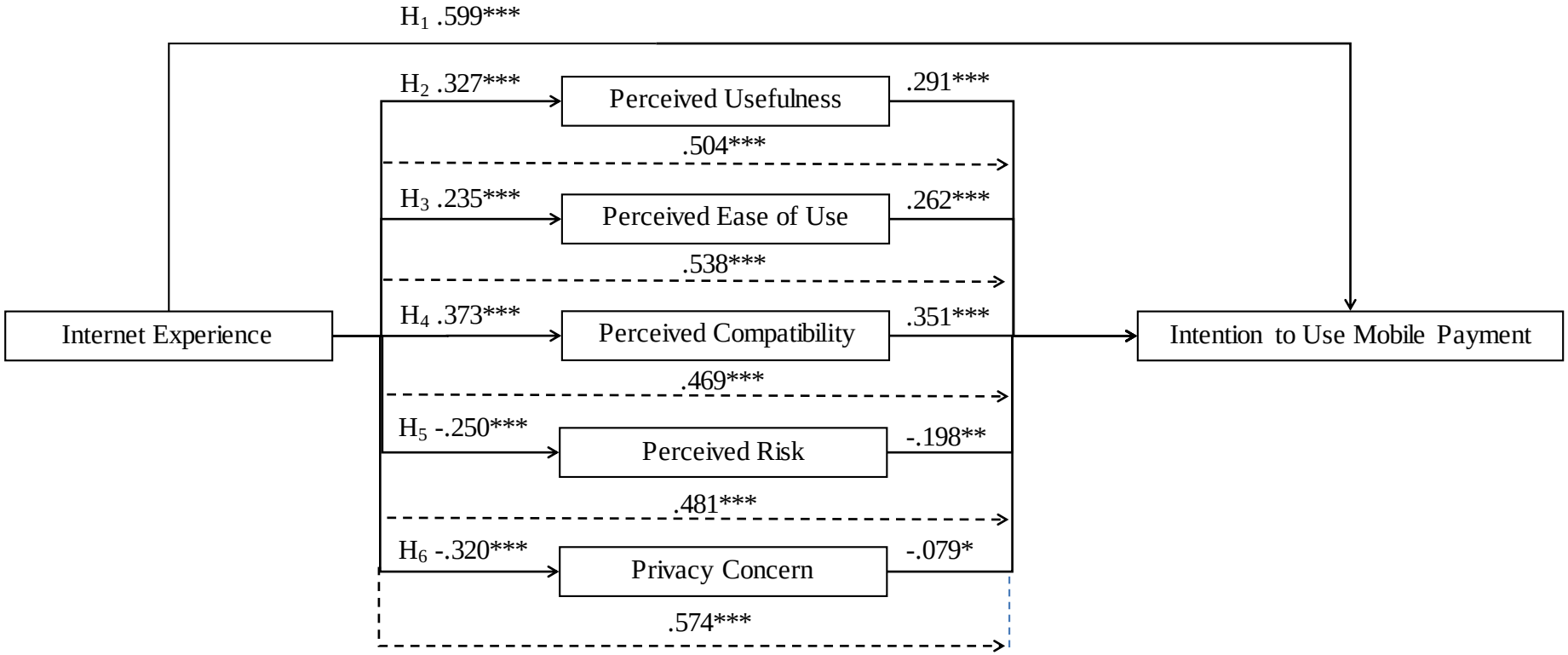
Users' Internet experience could mitigate their anxiety about privacy issues. Users may find that personal information is safe in online transactions if they experienced online shopping and banking. Most users may realize that the leaking of information or the hacking of

accounts is a low-frequency event. The confidence in these platforms may be transferred to their intention to use mobile payment. However, mobile payment users can also have concerns about privacy and security (Au & Kauffman, 2008). Mobile payment is dealt with at mobile terminals, through which personal information and transactions can be revealed to unauthorised parties. Mobile terminals record more information, e.g., users' locations and phone call records, than credit card terminals. Unauthorized accesses could mean unaffordable losses to users. Consequently, privacy concern influences users' adoption of mobile payment. Research shows that 48.2% of users believe that mobile payment has privacy issues because users are requested to provide personal information when using mobile payment without being given the reasons for providing such information (Chen, 2008).

Hypothesis 6. Privacy concern mediates the relationship between Internet experience and intention to use mobile payment.

Our theoretical model based on these arguments is displayed in Figure 1. The relationship between users' Internet experience and their intention to use mobile payment is mediated by perceived usefulness, perceived ease of use, perceived compatibility, perceived risk, and privacy concern.

Figure 1 The hypothesized research model and results



* p< .05; ** p < .01; *** p < .001

Methods

We focused on smartphones for a number of reasons that would not undermine the validity and generalisability of the research findings. First, smartphones are the most prevalent mobile devices, ranked first among all the forms of mobile devices (Sahagian, 2013). The popularity of smartphones implies that the views of smartphone users could be representative. Second, the technical features of smartphones make them a more convenient means to access the Internet than other mobile devices. Thirdly, smartphones are easy to carry.

Data and measures

We received 922 usable responses from 1,438 randomly selected mobile users (response rate 64.1%) that visited 25 randomly selected branches of China Unicom in Guangdong, China. Being one of China's largest telecommunications companies, China Unicom has over 500 branches in Guangdong.

All variables (measured with seven-point Likert scales) in Table 1 except Internet experience were from the literature on mobile payment (Chandra et al., 2010; Chen, 2008; Dong-Hee, 2010; Venkatesh, et al., 2003; Wang et al., 2008). We adopted Internet experience from studies on the experience of related products in cognitive theory (Festinger, 1957; Johnson & Russo, 1984; Punj & Staelin, 1983) and the adoption of new products (Johnson & Russo, 1984; Kim et al., 2008; Miyazaki & Fernandez, 2001; Qi et al., 2009).

Reliability and validity

The evaluation of the reflective measurement models examines their reliability and validity (Henseler, et al., 2009). The Cronbach's alpha coefficients of all seven components in Table

1 surpass .70 for the test of construct reliability (Nunnally, 1978). Factor analysis returned adequate reliability because all the original items loaded highly in their corresponding dimensions. The average variance extracted (AVE) gauges convergent validity. All reflective constructs and dimensions attain convergent validity because their AVE rates surpass .50 in Table 2 (Roldan & Sanchez-Franco, 2012). Mediation requires discriminant validity among all the variables (Gummerus, et al., 2012). Lack of discriminant validity may result in full mediation if the mediating variable is a manipulation check of the independent or dependent variable. Each reflective construct in Table 2 relates more strongly to its own measures than to the rest of the constructs.

Table 1 Measures and reliability

Items	**Factor Loading**	**Cronbach's Alpha**
Dependent Variable – *Intention to Use Mobile Payment*		.891
Given a chance, I intend to adopt mobile payment.	**.821**	
Given a chance, I will frequently use mobile payment.	**.867**	
I will strongly recommend others to use mobile payment.	**.847**	
Independent Variable – *Internet Experience*		.878
I use a computer to shop online often.	**.807**	
I use a computer to look at the management of my bank account often.	**.840**	
I use online banking to complete a transaction often.	**.802**	
Mediators		
Perceived Usefulness		.854

Using mobile payment will improve my shopping experience.	**.733**	
Using mobile payment will enhance my shopping effectiveness.	**.793**	
Using mobile payment will improve my shopping productivity.	**.728**	
Overall, I will find mobile payment useful.	**.656**	
Perceived Ease of Use		.822
Learning to use mobile payment will be easy.	**.626**	
Mobile payment will be easy to use.	**.622**	
The process will be clear and understandable when I use mobile payment.	**.631**	
Perceived Compatibility		.875
Using mobile payment is compatible with the way I like to shop.	**.725**	
Using mobile payment will enhance my lifestyle and image.	**.779**	
Using mobile payment will be fun.	**.750**	
Using mobile payment will suit me.	**.695**	

Perceived Risk		.825
There will be high potential for loss associated with using mobile payment.	**.794**	
There will be too much uncertainty associated with using mobile payment.	**.823**	
Using mobile payment will involve many unexpected problems.	**.769**	
Privacy Concern		.839
My personal information stored in the databases for mobile payment will not be protected.	**.830**	
My personal information stored in the databases for mobile payment will not be accurate.	**.841**	
The personal information I provide for mobile payment will not be used only for the purposes I authorize.	**.785**	

Common Method Bias

Common method bias was tested via confirmatory factor analysis (Podsakoff, et al., 2003). First, a seven-factor model was estimated. Each of the 23 items was restricted to an indicator for the respective latent factor. The fit indices of the first model were: $\alpha^2/df = 1.25$, adjusted goodness-of-fit (AGF) = .873, root mean square error of approximation (RMSEA) = .017. All satisfied the thresholds, i.e., $\alpha^2/df < 3$, AGF > .80, RMSEA < .06 (Gefen, et al., 2000). Second, one additional factor was added to the seven factors to represent the unmeasured common method. All 23 items loaded on the additional methods factor, which was constrained to be uncorrelated with the other seven factors. The fit indices of the second model ($\alpha^2/df = 1.26$, AGF = .873, RMSEA = .019) were satisfying. The difference between the two models in chi-square test was not significant ($\alpha(2) = .03$, p = n.s.). Common method bias was not a serious concern.

Table 2 Discriminant validity

		Average variance extracted	1	2	3	4	5	6	7
1	Intention to use mobile payment	.627	**.792**						
2	Internet experience	.706	.547	**.840**					
3	Perceived usefulness	.667	.418	.390	**.817**				
4	Perceived ease of use	.794	.344	.373	.607	**.891**			
5	Perceived compatibility	.750	.475	.430	.703	.567	**.866**		
6	Perceived risk	.664	-.255	-.392	-.414	-.295	-.420	**.815**	
7	Privacy concern	.714	-.277	-.406	-.420	-.259	-.401	.390	**.845**

Off-diagonal elements (i.e., the correlations among constructs) are significant at $p < .001$ and are lower than diagonal elements in bold (i.e., the square root of variance shared between the constructs and their measures).

Results

To test the hypotheses, first, we examined if the independent variable affected the dependent variable. Second, we tested the relationships between the independent variable and the mediators. Third, we regressed the dependent variable against both the independent variable and the mediators. A mediation effect exists if 1) the contribution of the independent variable in the third step drops significantly, compared to its impact on the dependent variable in the second step; and 2) significant relationships exist in the first two steps (Baron & Kenny, 1986). We tested the five mediators individually, controlling for the respondents' gender, age, education background, and salary because of their effects on users' demand for smart phones (Hsiao & Chen, 2015).

The results in Table 3 show that 1) Internet experience positively affects users' intention to use mobile payment ($\beta = .599$, $p < .001$); 2) Internet experience significantly predicts the five mediating factors ($p < .001$); and 3) the impact of Internet experience on mobile payment drops substantially, controlling for the mediators. Figures 1 displays the parameter estimates for the mediation model. All the hypotheses received empirical support.

Table 3 The results (N = 922)

Direct effect (H1: Internet experience → Intention to use mobile payment): 0.599***, Adj R-squared: 0.29										
Mediators	Perceived usefulness (H2)		Perceived ease of use (H3)		Perceived compatibility (H4)		Perceived risk (H5)		Privacy concern (H6)	
Internet experience → Mediators	.327	***	.235	***	.373	***	-.250	***	-.320	***
Mediators → Intention to use mobile payment	.291	***	.262	***	.351	***	-.198	**	-.079	*
Internet experience → Intention to use mobile payment, controlling for the mediators	.504	***	.538	***	.469	***	.481	***	.574	***
Adj R-squared	0.34		0.32		0.36		0.32		0.30	
Conclusion on mediation	Partial		Partial		Partial		Partial		Partial	

* p< 0.05; ** p <0.01; *** p < 0.001

Discussion

The use of mobile payment is associated with the ubiquitous use of mobile devices and the Internet (de Meijer & Bye, 2011). Users' Internet experience via computers affects their intention to use mobile payment. The direct effect in this study is consistent with the literature. This study proposed and empirically tested five mediating factors in TAM and IDT to understand how users' Internet experience affects their intention to use mobile payment. The findings revealed that Internet experience increases users' perceived usefulness, ease of use, and compatibility of mobile payment, which further enhance users' intention to adopt mobile payment. Internet experience mitigates users' perceived risk and privacy concerns, which hinder users' intention to use mobile payment.

Conclusions and implications

Experience as an important antecedent of behaviour not only affects users' behavioural intentions but also influences their social perceptions. The experience of using similar or related products helps users form cognitions about using new products. One of the key arguments in this study is that users' experience of financial activities based on computers and Internet contributes to the adoption of mobile payment. The effect of experience also affects users' social perceptions, which subsequently affect their behavioural intentions. We have thus contributed to the literature on new technology adoption by proposing and examining the direct and indirect impacts of users' Internet experience on their intention to adopt the new technology of mobile payment.

We have contributed to TAM and IDT literature by considering the mediating role of its key constructs in the relationship between users' experience and their behavioural intentions.

Previously, perceived usefulness, perceived ease of use, and perceived compatibility were used as antecedents to users' adoption of innovation. These constructs can be a function of users' experience of similar or related technologies. We have explained an important approach to TAM and IDT that subsequently affect users' intention to use mobile payment by proposing and examining the mediating effects of certain conceptual constructs.

Combining TAM and IDT, the study contributes to technology adoption literature by applying widely used frameworks to explain users' acceptance of a new technology in the transitional technology environment. Scholars have made efforts to broaden adoption determinants into an integrated framework to explain factors that facilitate adoption (Verdegem & De Marez, 2011). The theoretical model we examined drew a larger picture of the direct and indirect antecedents to users' adoption decisions. In the context of mobile payment, which could be an extension of e-business based on the Internet platform, our model helps to understand the mechanism of how related or similar experience could affect the intention to use upgraded technologies or products.

Our research has managerial implications for innovation strategies. Based on different strategic vision and resource configuration, firms may take different choices or combinations of exploration and exploitation strategies in product innovation (Greve, 2007). Exploration 'is experimentation with new alternatives whose returns are uncertain, distant, and often negative while exploitation is the refinement and extension of existing competencies, technologies, and paradigms exhibiting returns that are positive, proximate, and predictable' (March, 1991, p.85). Exploration often searches for new radical innovation with less connection to the firm's current competences and products, while exploitation generally creates incremental improvement of existing products and customer experience. It was suggested that experienced top management teams favour exploitation over exploration

(Beckman, 2006). Our research findings provide support to the exploitation strategy and illuminate in two ways that the design and function of a new product need to align well with users' experiences and perceptions to related products. First, mobile payment requires users' familiarity of relevant hardware, which possesses the basic functions of computers. Most of the essential features of smart phones are based on those of computers. Users' existing knowledge and skills of using these features enhance their capability of using smart phones. Second, mobile payment requires users' familiarity of relevant software, including banks' and merchants' applications as well as their settings, etc. The use of these applications and settings requires users' knowledge and skills of using software and settings on a computer.

Limitations and future research directions

A number of research directions could enrich the study stream. Investigation of how social and cultural factors influence the adoption of mobile payment is lacking in the literature. For instance, trust, a social factor closely related to perceived risk and privacy concern, can be developed both before and after the acceptance of a technology (Hernandez-Ortega, 2011). Future research could examine the impact of trust on users' intention to use mobile payment.

The adoption of a new technology or product does not guarantee its continuous use. Most technology adoption studies focus on users' first adoption or acceptance of an innovation and ignore its continuous use (Eriksson & Nilsson, 2007). In our robustness tests, we noticed the difference in terms of the proposed mediation effects between the users with mobile payment experience and those without such experience. Future research could track this line of enquiry and explore the factors that enable the continuous adoption of innovation.

Both trust and the continuous use of products or services may be significantly affected by the quality of the products or services that consumers receive. Poor quality of new technologies signals a low level of usefulness and undermines users' intentions to use the technologies

(Daim, et al., 2013). Future research could examine how the quality of various elements in the value chain affects users' perceptions of the usefulness and compatibility of mobile payment.

The data in this study were from China. The penetration of mobile payment varies among countries due to their different economic, cultural, social, technological, and demographic features (Amoroso & Magnier-Watanabe, 2012; Hayashi, 2012). A cross-country comparative study can help reveal differences in perceptions of new technologies (Balta-Ozkan, et al., 2014). Future research could examine our theoretical model in other business settings and compare the results across cultural or national boundaries.

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